

7. Measurement Data (continued)

7.12. Public Exposure to Radio Frequency Energy Levels (15.247(i) (1.1307 (b)(1)) RSS-GEN, ISSUE 5, section 3.4, RSS 102)

7.12.1. FCC 15.247 (i) Requirements

Requirement: Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines.

Frequency (MHz)	MPE Distance (cm)	DUT Output Power (dBm)	DUT Antenna Gain (dBi)	Power Density		Limit (mW/cm ²)	Result
				(mW/cm ²)	(W/m ²)		
				(4)		(5)	
903	20	9.19	-1.0	0.001311385	0.01311385	0.6020000	Compliant
915	20	10.16	-1.0	0.001639571	0.01639571	0.6100000	Compliant
927	20	8.30	-1.0	0.001068391	0.01068391	0.6180000	Compliant

$$PD = \frac{OP + AG}{(4 \times \pi \times d^2)}$$

- PD = Power Density (mW/cm²)
- OP = DUT Output Power (dBm)
- AG = DUT Antenna Gain (dBi)
- d = MPE Distance (cm)

1. Reference CFR 2.1091: For purposes of this section, a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons.
2. Table 6.2 of this test report.
3. Johanson Technology 0915AT43A0026 chip antenna specifications.
4. Power density is calculated from field strength measurement and antenna gain.
5. Reference CFR 1.1310, Table 1: Limits for Maximum Permissible Exposure (MPE), Section (B): Limits for General Population/Uncontrolled Exposure. Limit = f/1500, where f is in MHz.

Results: Passed - The device under test meets the exclusion requirement detailed for a device with a separation distance of 20 cm.